



PATENT
Customer No. 22,852
Attorney Docket No. 08702.0010-12000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
)
LARSEN et al.) Group Art Unit: 1646
)
Application No.: 09/935,144) Examiner: Not Yet Assigned
)
Filed: August 21, 2001)
)
For: NOVEL P-SELECTINLIGAND)
PROTEIN (PSGL))

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), applicants bring to the attention of the Examiner the documents listed on the attached PTO 1449. This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits for the above-referenced application.

Copies of the listed documents are attached.

Applicant respectfully requests that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached form.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claim in the application and applicants determine

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that the cited documents do not constitute "prior art" under United States law, applicants reserve the right to present to the office the relevant facts and law regarding the appropriate status of such documents.

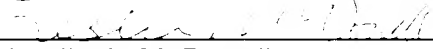
Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

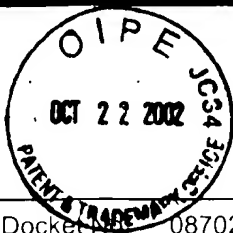
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Dated: October 22, 2002

By: 
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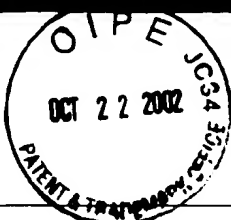
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U.S. PATENT DOCUMENTS

Examiner Initial*	Document Number	Issue Date	Name	Class	Sub Class	Filing Date If Appropriate
	4,657,853	04/14/1987	Freytag et al.	435	7	09/14/1984
	5,198,424	03/30/1993	McEver	514	13	04/07/1992
	5,304,640	04/19/1994	Lasky et al.	536	23.5	02/13/1992
	5,318,890	06/07/1994	Rosen et al.	435	7.24	05/06/1991
	5,360,733	11/01/1994	Fukuda et al.	435	193	10/01/1992
	5,464,778	11/07/1995	Cummings et al.	436	503	07/21/1994
	5,614,615	03/25/1997	Wong	536	17.9	08/25/1995
	5,827,817	10/27/1998	Larsen et al.	514	2	06/07/1995
	5,840,679	11/24/1998	Larsen et al.	514	8	06/07/1995
	5,843,707	12/01/1998	Larsen et al.	435	69.1	04/25/1995
	6,277,975	08/21/2001	Larsen et al.	536	23.4	08/30/1996

FOREIGN PATENT DOCUMENTS

Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No
0 480 408 A1	4/15/92	EP	C12Q	1/48	
WO 90/01546	2/20/90	PCT	C12N	15/00	
WO 91/00868	1/24/91	PCT	C07H	21/00	
WO 91/06632	5/16/91	PCT	C12N	5/06	
WO 92/01718	2/6/92	PCT	C07K	15/00	
WO 92/09698	6/11/92	PCT	C12P	21/06	
WO 92/16612	10/1/92	PCT	C12M		
WO 92/19735	11/12/92	PCT	C12N	15/12	
WO 93/03052	2/18/93	PCT	C07H	21/02	
WO 93/04199	3/4/93	PCT	C12Q	1/68	
WO 93/09250	5/13/93	PCT	C12Q	1/68	
WO 93/13220	7/8/93	PCT	C12Q	1/68	
WO 93/15228	8/5/93	PCT	C12Q	1/68	



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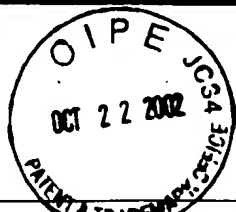
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FOREIGN PATENT DOCUMENTS

	Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No
	WO 94/07917	4/14/94	PCT	C07K	13/00	
	WO 94/10309	5/11/94	PCT	C12N	15/12	
	WO 94/11498	5/26/94	PCT	C12N	15/10	
	WO 97/06176	2/20/97	PCT	C07H	3/06	
	WO 98/08949	3/5/98	PCT	C12N	15/12	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Supplementary Partial European Search Report, mailed 17 October 2001
	International Search Report, mailed 05 December 1995 for PCT/US95/04968
	International Search Report, mailed 07 February 1995 for PCT/US93/10168
	International Search Report, mailed 01 August 1996 for PCT/US95/04968
	Aruffo et al., "CD62/P-Selectin Recognition of Myeloid and Tumor Cell Sulfatides", <i>Cell</i> , Vol. 67:35-44 (1991).
	Bierhuizen et al., "Expression Cloning of cDNA Encoding UDP-Glc:Galbetal-3-GalNAc-R (G1cNAc to Ga1NAc) betal-6G1cNAc-R Transferase by Gene Transfer into CHO Cells Expressing Polymoma Large Tumor Antigen" <i>PNAS</i> , Vol.89:9326-9330 (October 1992).
	Campbell et al., "Regulatory Mutations in CHO Cells Induce Expression of the Mouse Embryonic Antigen SSEA-1" <i>Cell</i> , Vol. 35:303-309 (November 1983).
	Davenpeck et al., "Activation of Human Leukocytes Reduces Surface P-Selectin Glycoprotein Ligand-1 (PSGL-1, CD162) and Adhesion to P-Selectin In Vitro" <i>J. Immunol.</i> , Vol. 165:2764-2772 (2000).
	Goochee et al., "The Oligosaccharides of Glycoproteins Factors Affecting Their Synthesis and Their Influence on Glycoprotein Properties" <i>Frontiers in Bioprocessing II, Proc. of Frontiers in Biochemistry II</i> , pp198-240, Boulder, Colorado, (June 17-21, 1990).
	Johnston et al., "Cloning of GMP-140, a Granule Membrane Protein of Platelets and Endothelium: Sequence Similarity to Proteins Involved in Cell Adhesion and Inflammation" <i>Cell</i> , Vol. 56:1033-1044 (March 24, 1989).
	Kruger et al., "Activated T Lymphocytes Bind <i>In Situ</i> to Stromal Tissue of Colon Carcinoma but lack Adhesion to Tumor Cells" <i>Eur. J. Immunol.</i> , 31:138-145 (2001).
	Larkin et al., "Spectrum of Sialylated and Nonsialylated Fuco-oligosaccharides Bound by the Endothelial-Leukocyte Adhesion Molecule E-selectin" <i>J. Biol. Chem.</i> , Vol. 267:13661-1368 (1992)
	Larsen et al., "P-Selectin and E-Selectin" <i>J. Biol. Chem.</i> , Vol. 267, No. 16:11104-11110 (Issue 5 of June 5, 1992)



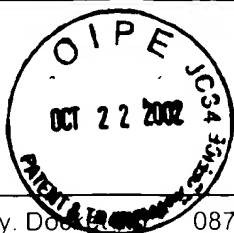
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Filing Date	August 21, 2001	Group:	1646	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Li et al., "Visualization of P-Selectin Glycoprotein Ligand-1 as a Highly Extended Molecule and Mapping of Protein Epitopes for Monoclonal Antibodies" <i>J. Biol. Chem.</i> , Vol. 271, No.11:6342-6348 (March 15, 1996)
	Maemura et al., "Poly-N-Acetylactosaminyl O-Glycans Attached to Leukosialin" <i>J. Biol. Chem.</i> , Vol. 267, No. 34:24379-24386 (1992)
	Manjunath et al., "a Transgenic Mouse Model to Analyze CD8+ Effector T Cell Differentiation <i>in vivo</i> " <i>PNAS</i> , Vol. 96, No. 24:13932-13937 (November 23, 1999).
	Moore et al., "Identification of a Specific Glycoprotein Ligand for P-Selectin (CD62 on Myeloid Cells" <i>J. Cell Biology</i> , Vol. 118, No. 2:445-456 (July, 1992).
	Moore et al., "The P-Selectin Glycoprotein Ligand from Human Neutrophils Displays Sialylated, Fucosylated, O-Linked Poly-N-Acetylactosamine" <i>J. Biol. Chem.</i> , Vol. 269, No. 37:23318-23327 (September 16, 1994).
	Mulligan et al., "Protective Effects of Oligosaccharides in P-Selectin-Dependent Lung Injury" <i>Nature</i> , Vol. 364:149-151 (July 8, 1993).
	Mulligan et al., "Protective Effects of Sialylated Oligosaccharides in Immune Complex-Induced Acute Lung Injury" <i>J. Exp. Med.</i> , Vol. 178:623-631 (August 1993).
	Mulligan et al., "Neutrophil-dependent Acute Lung Injury" <i>J. Clin. Invest.</i> , Vol. 90:1600-1607 (October, 1992).
✓	Norgard et al., "Characterization of a Specific Ligand for P-Selectin on Myeloid Cells" <i>J. Biol. Chem.</i> , Vol. 268, No. 17:12674-12774 (June 15, 1993).
	Paul, W.E., "Peripheral Circulation of T-Lymphocytes" <i>Fundamental Immunology</i> , Fourth Edition, Chapter 11: 393-397.
✓	Phillips et al., "ELAM-1 Mediates Cell Adhesion by Recognition of a Carbohydrate Ligand, Sialyl-Le ^x ", <i>Science</i> , Vol. 250:1130-2 (November 23, 1990).
	Pickier et al., "The Neutrophil Selectin LECAM-1 Presents Carbohydrate Ligands to the Vascular Selectins ELAM-1 and GMP-140", <i>Cell</i> , Vol. 66:921-933 (September 6, 1991).
	Polley et al., "CD62 and Endothelial Cell-Leukocyte Adhesion Molecule 1 (ELAM-1) Recognize the Same Carbohydrates Ligand, Sialyl-Lewis x", <i>PNAS</i> , Vol. 88:6224-6228 (July 1991).
	Sako, D., "Expression Cloning of a Functional Glycoprotein Ligand for P-Selectin" <i>Cell</i> , Vol. 75:1179-1186 (December 17, 1993).
	Steininger et al., "The Glycoprotease of <i>Pasteurella Haemolytica</i> A1 Eliminates Binding of Myeloid Cells to P-Selectin but not to E-Selectin" <i>Biochem. & Biophys. Res. Comm.</i> , Vol. 188, No. 2:760-766 (October 30, 1992).
✓	Takada et al., "The Cytokine-Adhesion Molecule Cascade in Ischemia/Reperfusion Injury of the Rat Kidney" <i>J. Clin. Invest.</i> , Vol. 99, No. 11:2682-2690 (June, 1997).
	Vachino et al., "P-Selectin Glycoprotein Ligand-1 is the Major Counter-Receptor for P-Selectin on Stimulated T Cells and Is Widely Distributed in Non-functional Form on Many Lymphoid Cells" <i>J. Biol. Chem.</i> , Vol. 270, No. 37:21966-21974 (September 15, 1995).



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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
	Watson et al., "Neutrophil Influx into an Inflammatory Site Inhibited by a Soluble Homing Receptor-IgG Chimera" <i>Nature</i> , Vol. 349:164-167 (January 10, 1991)
	Wein et al., "Comparison of Human Eosinophil and Neutrophil Ligands for P-Selectin: Ligands for P-Selectin Differ from Those for E-Selectin" <i>Am. J. Respir. Cell. Mol. Biol.</i> , Vol. 12:315-319 (1995)
	Wilkins et al., "Tyrosine Sulfation of P-Selectin Glycoprotein Ligand-1 Is Required for High Affinity Binding to P-Selectin" <i>J. Biological Chem.</i> , Vol. 270, No.39:22677-22680 (Issue of September 29, 1995)
	Winn et al., "Anti-P-Selectin Monoclonal Antibody Attenuates Reperfusion Injury to the Rabbit Ear" <i>J. Clin. Invest.</i> , Vol. 92:2042-2047 (October, 1993)
	Zhou et al., "The Selectin GMP-140 Binds to Sialylated, Fucosylated Lactosaminoglycans on Both Myeloid and Nonmyeloid Cells", <i>J. Cell Biol.</i> , Vol. 115, No. 2:557-564 (October 1991)

Examiner	Date Considered
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